Small Business Innovation Research/Small Business Tech Transfer

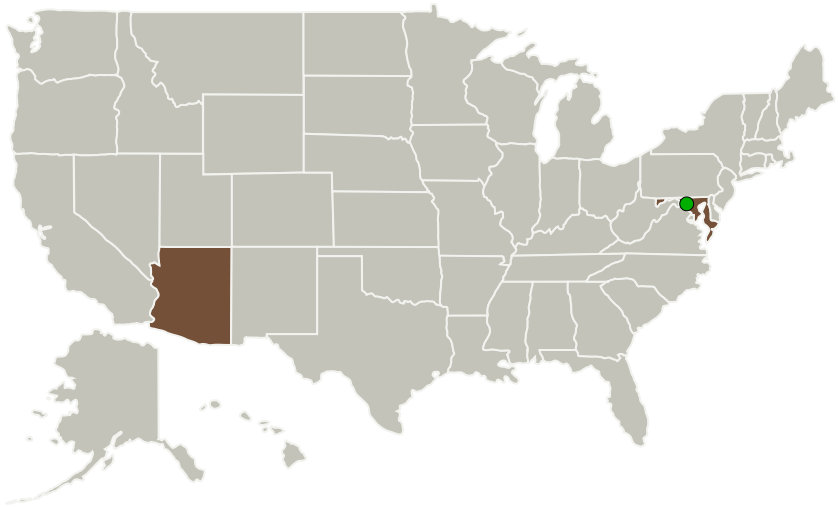
Precision Guided Parafoil System For Sounding Rocket Recovery, Phase II

Completed Technology Project (2016 - 2019)

Project Introduction

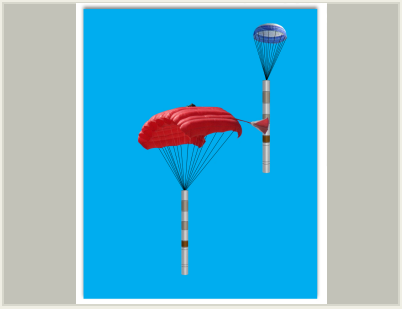
The primary goal of the proposed STARA innovation is to develop and demonstrate a high altitude precision guided parafoil system that will enable NASA to control the final landing point of the sounding rocket payload, thus reducing system offset, recovery time, and recovery cost. Current recovery methods utilize unguided parachutes, which are susceptible to large uncertainties in recovery locations due to unforeseen variables. Using a precision guiding parafoil system deployed at high altitudes coupled with a steerable ballute would enable the landing of the payload at a defined location.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
STARA Technologies Corporation	Lead Organization	Industry	Gilbert, Arizona
Goddard Space Flight Center(GSFC)	Supporting Organization	NASA Center	Greenbelt, Maryland

Primary U.S. Work Locations	
Arizona	Maryland



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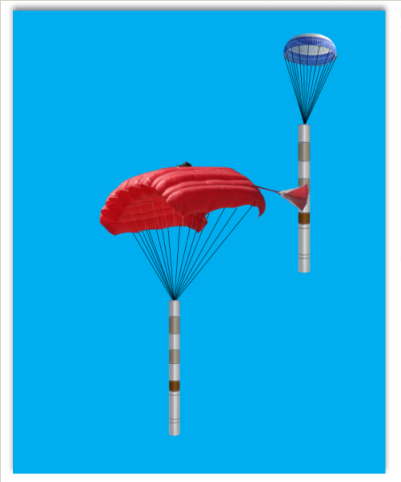
Completed Technology Project (2016 - 2019)

Images



Briefing Chart Image
Precision Guided Parafoil System For Sounding Rocket Recovery, Phase II
(https://techport.nasa.gov/image/133298)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

STARA Technologies Corporation

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

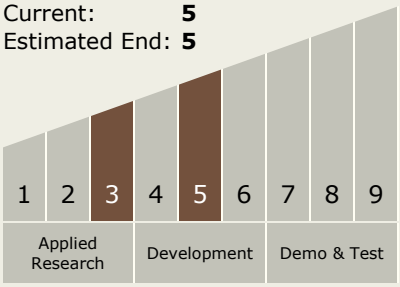
Carlos Torrez

Principal Investigator:

Glen R Bailey

Technology Maturity (TRL)

Start: **3**
Current: **5**
Estimated End: **5**



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Technology Areas

Primary:

- TX09 Entry, Descent, and Landing
  - TX09.2 Descent
    - TX09.2.1 Aerodynamic Decelerators

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System